

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A loudspeaker device comprising:

a power amplifier for receiving an input signal via a subtracter;

a speaker unit for reproducing an output signal of said power amplifier;

an acoustic pipe coupled in front of said speaker unit for guiding sound waves reproduced by said speaker unit;

a microphone for detecting acoustic outputs radiated from said speaker unit;

a microphone amplifier for amplifying an acoustic output signal detected by said microphone; and

a negative feedback circuit,

wherein said negative feedback circuit is formed by ~~connecting an acoustic output signal of said microphone amplifier~~ inputting an added signal to said subtracter ~~subtracter, the added signal being an addition of a first output signal delivered from and at the same time by~~
~~connecting the acoustic output signal of said microphone amplifier to said subtracter via a~~ and a
second output signal delivered from said microphone and passed through said high-pass filter,
and

wherein a cutoff frequency of said high-pass filter is matched with a resonance frequency of said acoustic pipe.

2. (Canceled)

3. (Currently Amended) A loudspeaker device comprising:

a power amplifier for receiving an input signal via a subtracter;

a speaker unit for reproducing an output signal of said power amplifier;

an acoustic pipe coupled in front of said speaker unit for guiding sound waves reproduced by said speaker unit;

a microphone for detecting acoustic outputs radiated from said speaker unit;

a microphone amplifier for amplifying an acoustic output signal detected by said microphone; and

a negative feedback circuit,

wherein said negative feedback circuit is formed by ~~connecting an acoustic output signal of said microphone amplifier~~ inputting an added signal to said subtracter via a subtracter, the added signal being an addition of a first output signal delivered from said microphone amplifier and passed through a -12dB/oct. high-pass filter and a second output signal delivered from said microphone and passed through a -6 dB/oct. high-pass filter and a -12 dB/oct. high-pass filter connected in parallel, and

wherein a cutoff frequency of said -12 dB/oct high-pass filter is matched with a resonance frequency of said acoustic pipe.

4. (Currently Amended) A loudspeaker device comprising:

a power amplifier for receiving an input signal via a subtracter;

a speaker unit for reproducing an output signal of said power amplifier;

an acoustic pipe coupled in front of said speaker unit for guiding the sound waves;
a microphone for detecting acoustic outputs radiated from said speaker unit;
a microphone amplifier for amplifying an acoustic output signal detected by said microphone; and

a negative feedback circuit,

wherein said negative feedback circuit is formed by ~~connecting an acoustic output signal of said microphone amplifier~~ inputting an added signal to said ~~subtractor via a subtracter~~, the added signal being an addition of a first output signal delivered from said microphone amplifier and passed through a -12 dB/oct. high-pass filter ~~connected in parallel with one of a~~ and a second output signal delivered from said microphone and passed through one of a -6 dB/oct. low-pass filter and a -12 dB/oct. low-pass filter, and

wherein a cutoff frequency of said -12 dB/oct. high-pass filter is matched with a resonance frequency of said acoustic pipe.